

PCT

10/553740

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference PAT 939W-90	<b>FOR FURTHER ACTION</b>	See item 4 below
International application No. PCT/CA2004/001636	International filing date ( <i>day/month/year</i> ) 07 September 2004 (07.09.2004)	Priority date ( <i>day/month/year</i> ) 26 September 2003 (26.09.2003)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant TSO3 INC.		

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).																								
2.	This REPORT consists of a total of 5 sheets, including this cover sheet.  In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.																								
3.	<p>This report contains indications relating to the following items:</p> <table style="width: 100%;"> <tr> <td style="width: 10%; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 30%;">Box No. I</td> <td style="width: 60%;">Basis of the report</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input checked="" type="checkbox"/>	Box No. VIII	Certain observations on the international application
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4.	The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).																								

<p style="text-align: center;">The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No. +41 22 740 14 35</p>	<p>Date of issuance of this report 27 March 2006 (27.03.2006)</p> <p>Authorized officer  <b>Athina Nickitas-Etienne</b></p> <p>Telephone No. +41 22 338 89 95</p>
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# PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To:  
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1100 - 100 Queen Street  
OTTAWA, Ontario  
Canada, K1P 1J9

7/4

REC'D 02 FEB 2005

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## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing (date/month/year) 25 January 2005 (25-01-2005)

Applicant's or agent's file reference  
PAT 939W-90

FOR FURTHER ACTION  
See paragraph 2 below

International application n°  
PCT/CA2004/001636

International filing date (date/month/year)  
07 September 2004 (07-09-2004)

Priority date (date/month/year)  
26 September 2003 (26-09-2003)

International Patent Classification (IPC) or both national classification and IPC

Applicant TSO3 INC. ET AL

### 1. This opinion contains indications relating to the following items :

- |                                     |              |  |
|-------------------------------------|--------------|--|
| <input checked="" type="checkbox"/> | Box No. I    | Basis of the opinion   |
| <input type="checkbox"/>            | Box No. II   | Priority   |
| <input type="checkbox"/>            | Box No. III  | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability   |
| <input type="checkbox"/>            | Box No. IV   | Lack of unity of invention   |
| <input checked="" type="checkbox"/> | Box No. V    | Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/>            | Box No. VI   | Certain documents cited  |
| <input type="checkbox"/>            | Box No. VII  | Certain defects in the international application   |
| <input checked="" type="checkbox"/> | Box No. VIII | Certain observations on the international application  |

### 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

### 3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/  
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Authorized officer

Ewa Chmura Nadeau (819) 997-2810

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/CA2004/001636

**Box No. I      Basis of this opinion**

1. With regard to the language, this opinion has been established on the basis of the international application in the language which it was filed, unless otherwise indicated under this item.

- ☐ This opinion has been established on the basis of a translation from the original language into the following language \_\_, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing  
☐ table(s) related to the sequence listing

b. format of material

- ☐ in written format  
☐ in computer readable form

c. time of filing/furnishing

- ☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments :

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/CA2004/001636

**Box No. V reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Claims	1 to 35	YES
	Claims	none	NO
Inventive step (IS)	Claims	1 to 35	YES
	Claims	none	NO
Industrial applicability (IA)	Claims	1 to 35	YES
	Claims	none	NO

**2. Citations and explanations :**

Claims 1 to 35 meet the criteria set out in PCT Article 33(2) to 33(4) , because the prior does not teach a method of gradually humidifying an enclosure particularly a sterilization chamber by reducing pressure in the chamber to a value below the boiling point of water at a water reservoir, and repeatedly bringing the reservoir into fluid communication with the chamber for a preselected period of time allowing the relative humidity to progressively increase with each repetition until the level of about 95% is achieved.

The method and apparatus defined in claims 1-35 are applicable in industry because they allow to reduce condensation of water vapour in a sterilization chamber during a cold sterilization process by controlling the number of steps selected to humidify the chamber, and the water pressure value corresponding to each step.

Document D1: CA 2,298,165 A1, published 11 August , 2001,  
Document D2: CA 2,270,512 A1, published 30 October, 2000,  
Document D3: US 5,344,622 A, published 06 September, 1994,  
Document D4: US 5,868,999 A, published 09 February , 1999,  
Document D5: CA 2,466,307A1, published 15 May , 2003,

Documents D1 and D5 are considered to be the most relevant pieces of the prior art.

D1 discloses a method of sterilizing an endoscope placed in a sterilization chamber which is run through sterilization cycles during which the pressure within the chamber is varied. The sterilizing conditions are preferably provided for by ozone gas in the presence of a humid atmosphere of at least 95% water saturation.

D5 teaches an ozone sterilization method involving humidification of a sterilization chamber. Water vapour and ozone containing gas are supplied to the sterilization chamber under vacuum.

There is no teaching in D1 and D5 about a method for increasing the relative humidity in the sterilization chamber in a plurality of graduated steps until a target value of water vapour pressure is reached.

Furthermore, D1 and D5 do not teach a sterilization apparatus with humidified ozone comprising a processor programmed to effect the humidification of the sterilization chamber in a plurality of graduated steps.

Similarly, D2 to D4 reveal the state of art directed to ozone sterilization methods and systems.

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.  
PCT/CA2004/001636

Box No. VIII

Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made :

Claim 1 does not comply with Article 6 because it fails to clearly define the subject matter for which protection is sought. As presented, the claim consists only of a preamble which is not followed by the body of the claim reciting the inventive features. In addition, the preamble describes the ambit but fails to explicitly formulate what is claimed: a process, a method, or an apparatus.

Claim 2 lacks clarity and does not comply with Article 6 because the preamble of the claim which refers to a process does not correspond to the body of the claim which recites steps of a method for humidifying a sterilization chamber.

Claims 3 to 15 lack clarity and do not comply with the Article 6 because the introductory phrases of claims 3 to 15 which dependent on claim 2 refer to a method not a process, and are therefore inconsistent with the preamble of claim 2.